

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,746	01/21/2004	Anders Valbjoern	6495-0046	3649
75	90 06/20/2006		EXAMINER	
Richard R. Michaud			CECIL, TERRY K	
McCormick, Pa CityPlace II	ulding & Huber LLP		ART UNIT	PAPER NUMBER
185 Asylum Str			1723	
Hartford, CT	06103		DATE MAILED: 06/20/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

_				./				
		Application No.	Applicant(s)					
		10/761,746	VALBJOERN ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Mr. Terry K. Cecil	1723					
Period fo	The MAILING DATE of this communication reply	on appears on the cover sheet w	ith the correspondence address					
THE - Exte after - If th - If NO - Failt Any	ORTENED STATUTORY PERIOD FOR F MAILING DATE OF THIS COMMUNICAT insions of time may be available under the provisions of 37 (or SIX (6) MONTHS from the mailing date of this communicat is period for reply specified above is less than thirty (30) days to period for reply is specified above, the maximum statutory are to reply within the set or extended period for reply will, by reply received by the Office later than three months after the led patent term adjustment. See 37 CFR 1.704(b).	CION. CFR 1.136(a). In no event, however, may a ion. s, a reply within the statutory minimum of thi period will apply and will expire SIX (6) MOI y statute, cause the application to become A	reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this communic BANDONED (35 U.S.C. § 133).	ation.				
Status								
1) 又	Responsive to communication(s) filed on	15 December 2005.						
		This action is non-final.						
3)	<i>,</i> —		ters prosecution as to the merit	s is				
-,	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
4)⊠	Claim(s) 1-11 is/are pending in the applic	cation.						
٠,٣	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)□	Claim(s) is/are allowed.	and administration of the second of the seco						
-	Claim(s) <u>1-11</u> is/are rejected.							
	Claim(s) is/are objected to.							
	Claim(s) are subject to restriction	and/or election requirement.						
	ion Papers							
	•							
-	The specification is objected to by the Exa							
10)[∑]	The drawing(s) filed on 21 January 2004							
	Applicant may not request that any objection	- · · · · · · · · · · · · · · · · · · ·	• •					
	Replacement drawing sheet(s) including the							
11)	The oath or declaration is objected to by t	the Examiner. Note the attache	d Office Action or form PTO-152	2 .				
Priority (ınder 35 U.S.C. § 119							
	Acknowledgment is made of a claim for for All b) Some * c) None of: 1. Certified copies of the priority documents. 2. Certified copies of the priority documents. 3. Copies of the certified copies of the	iments have been received. Iments have been received in A	Application No					
	application from the International E							
* (See the attached detailed Office action for	a list of the certified copies not	received.					
Attachmen	ıt(s)							
	e of References Cited (PTO-892)	4) Interview	Summary (PTO-413)					
2) D Notic	e of Draftsperson's Patent Drawing Review (PTO-94	Paper No(s)/Mail Date					
	mation Disclosure Statement(s) (PTO-1449 or PTO/s or No(s)/Mail Date <u>one</u> .	SB/08) 5) Notice of I 6) Other:	informal Patent Application (PTO-152)					

Application/Control Number: 10/761,746 Page 2

Art Unit: 1723

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2. Claims 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are indefinite because of the following reasons:
- The following terms lack antecedent basis: "the pressure control device" (claims 8 and 9).
 Claim 10 is rejected since it depends therefrom and suffers the same defect.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

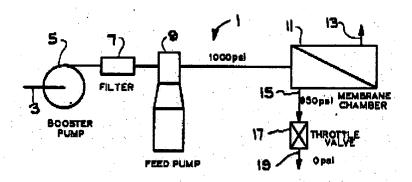
A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Application/Control Number: 10/761,746

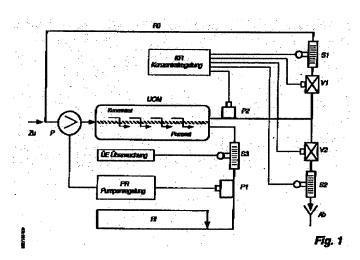
Art Unit: 1723

4. Claims 1, 6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Oklejas et al. (U.S. 4,983,305).



Oklejas teaches a water purification system having pump 9, a diaphragm unit 11, wherein the pump 9 provides the pressure for the consumer stream 13. A throttle valve controls the pressure in the primary side membrane chamber to ensure a desired amount of purified water (from seawater is produced).

5. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by the German Reference DE 4331102 A1, hereinafter '102. '102 teaches a water treatment system including



a pressure control device P1 and controller PR regulate the pressure of the pump (and therefore the pressure of the primary side) depending upon the pressure in the second side [as in claims 1-3].

Application/Control Number: 10/761,746

Art Unit: 1723

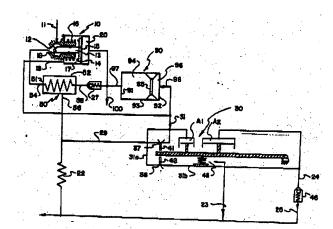
Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. Claims 1, 3-5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (U.S. 4,909,934) in view of ordinary knowledge of the skilled man OR in view of



DE '102. Brown teaches a water treatment system including a membrane filtration unit 50 having a control valve 10 controlling the pressure of the inlet stream (11 + 54) to the filtration unit in response to the pressure on the secondary side communicating with a

control chamber 20 of the valve [as in claims 1 and 3-4]. The pressure of the secondary side acts upon the disk 15 of the valve [as in claim 5]. On the consumer side, a check valve 27 opens in response to a predetermined pressure [as in claim 11]. Brown doesn't specify the source of the outlet pressure but pumps are well known to the skilled man for supplying fluid under pressure to a filtration system. Alternately, such is also shown by '102 (see "P" of the figure).

Application/Control Number: 10/761,746 Page 5

Art Unit: 1723

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oklejas in view of Kim et al. (U.S. 6,977,041). Kim teaches a sampling valve 57 in parallel with other valves of the concentrate line. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the valve 57 of Kim in parallel with the throttle valve of Oklejas, since Kim teaches the benefit of sampling and testing the concentrated ion water.

- 9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE '102. '102 doesn't specify the secondary side pressure to be within 35 to 180 bar. However, it is considered to be obvious to optimize the secondary side operating pressure in order to maintain system efficiency and depending upon the flow characteristics of the dialysis system in which the product water will be used.
- 10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oklejas. The operating pressures are considered to be within ordinary skill depending upon e.g. the degree of contamination of the feed water, the desired purity of the product water, the efficiency of the membrane, etc.

Art Unit: 1723

11. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (571) 272-1138 at the Carlisle campus in Alexandria, Virginia for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:30a to 4:30p, on at least four days during the week M-F.
- Wanda Walker, the examiner's supervisor, can be reached at (571) 272-1151 if attempts to reach the examiner are unsuccessful.
- The Fax number for this art unit for official faxes is (571) 273-8300.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary Examiner
Art Unit 1723

TKC June 16, 2006